BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
WILLIAM A. MUNDELL
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC. COMPLIANCE WITH SECTION 271 OF THE TELECOMMUNICATIONS ACT OF 1996.	No.: T-00000A-97-0238 **NOTICE OF FILING TESTIMONY OF KEN WILSON FOR § 271 WORKSHOP ON CHECKLIST ITEMS 1, 11 AND 14**

In preparation for the § 271 workshop on checklist items 1, 11 and 14, Electric Lightwave, Inc. hereby files the testimony of Ken Wilson.

Dated this 3 day of August, 2000.

GALLAGHER & KENNEDY, P.A.

BY: _____

Michael M. Grant
Todd C. Wiley
Gallagher & Kennedy, P.A.
2575 East Camelback Road
Phoenix, Arizona 85016-9225
Attorneys for Plaintiff

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

ORIGINAL and ten copies filed this date with Docket Control.

COPY of the foregoing mailed this 3rd day of August, 2000, to:

Maureen A. Scott
Legal Division
Arizona Corporation Commission
1200 W. Washington St.
Phoenix, AZ 85007

Thomas M. Dethlefs
U S WEST Communications, Inc.
Suite 5100
1801 California St.
Denver, CO 80202

Timothy Berg
Fennemore Craig, P.C.
Suite 2600
3003 N. Central Ave.
Phoenix, AZ 85012

Maureen Arnold
U S WEST Communications, Inc.
Room 1010
3033 N. Third St.
Phoenix, AZ 85012

Richard S. Wolters
AT&T Communications of the Mountain States, Inc.
Room 1575
1875 Lawrence St.
Denver, CO 80202

Patricia L. vanMiddle
AT&T
Suite 828
2800 N. Central Ave.
Phoenix, AZ 85004

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

Joan Burke
Osborn Maledon
21st Floor
2929 N. Central Ave.
P.O. Box 36379
Phoenix, AZ 85067-6379

Mark Dioguardi
Tiffany and Bosco PA
500 Dial Tower
1850 N. Central Ave.
Phoenix, AZ 85004

Nigel Bates
Electric Lightwave, Inc.
4400 NE 77th Ave.
Vancouver, WA 98662

Thomas L. Mumaw
Snell & Wilmer
One Arizona Center
Phoenix, AZ 85004-0001

Stephen H. Kukta
Sprint Communications Company, L.P.
External Affairs, Western Region
7th Floor
1850 Gateway Dr.
San Mateo, CA 94404

Thomas H. Campbell
Lewis & Roca
40 N. Central Ave.
Phoenix, AZ 85007

Bill Haas
Richard Lipman
McLeodUSA
6400 C. Street, SW
Cedar Rapids, IA 54206-3177

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

Bradley Carroll, Esq.
Cox Arizona Telcom, L.L.C.
1550 W. Deer Valley Road
Phoenix, Arizona 85027

Richard M. Rindler
Morton J. Posner
Swidler Berlin Shereff Freidman, LLP
Suite 300
3000 K St., N.W.
Washington, DC 20007

Michael W. Patten
Brown & Bain
2901 N. Central Ave.
P.O. Box 400
Phoenix, AZ 84001-0400

Charles Kallenbach
American Communications Services, Inc.
131 National Business Pkwy.
Annapolis Junction, MD 20701

Karen L. Clauson
Thomas F. Dixon
MCI Telecommunications Corp.
Suite 3900
707 17th St.
Denver, CO 80202

Joyce Hundley
United States Department of Justice
Antitrust Division
Suite 8000
1401 H St., N.W.
Washington, DC 20530

Scott Wakefield
RUCO
Suite 1200
2828 N. Central Ave.
Phoenix, AZ 85004

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

Daniel Waggoner
Davis Wright Tremaine
2600 Century Square
1501 Fourth Ave.
Seattle, WA 98101-1688

Alaine Miller
Nextlink Communications, Inc.
Suite 2200
500 18th Ave.
Bellevue, WA 98004

Karen L. Clauson
Eschelon Telecom, Inc.
Suite 120
730 2nd Ave South
Minneapolis MN 55402

Linda Maguire

10407-0008/857733

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
WILLIAM A. MUNDELL
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH SECTION 271 OF THE TELECOMMUNICATIONS ACT OF 1996.	DOCKET NO.: T-00000A-97-0238

TESTIMONY OF KENNETH WILSON ON BEHALF OF ELECTRIC LIGHTWAVE, INC. FOR § 271 WORKSHOP ON CHECKLIST ITEMS 1, 11 AND 14

August 3, 2000

Michael M. Grant
Todd C. Wiley
Gallagher & Kennedy, P.A.
2575 East Camelback Road
Phoenix, Arizona 85016-9225

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME, POSITION, EMPLOYER AND BUSINESS ADDRESS.

A. My name is Kenneth L. Wilson. I am a Senior Consultant and Technical Witness with Boulder Telecommunications Consultants, LLC. My business address is 970 11th Street, Boulder, Colorado 80302. I am filing this testimony on behalf of Electric Lightwave, Inc. ("ELI").

Q. PLEASE REVIEW YOUR EDUCATION AND RELEVANT WORK EXPERIENCE.

A. I received a B.S. in Electrical Engineering from Oklahoma State University in 1972. I received an M.S. in Electrical Engineering from the University of Illinois in 1974. I completed the course work for a Ph.D. in Electrical Engineering at the University of Illinois in 1976.

I am in my third year with Boulder Telecommunications Consultants, LLC as Senior Consultant and Expert Witness. I have represented CLECs in regulatory and civil forums in dozens of cases over the past three years, primarily in the U S WEST[1] 14 state region. From 1995 through early 1998, I was the Business Management Director for AT&T in Denver and managed one of the groups responsible for getting AT&T into the local market in the U S WEST states. My primary responsibility was AT&T's lead negotiator with U S WEST in the 14 U S WEST states. I also served as the senior

[1] Although U S WEST recently merged with QWEST, I continue to refer to "U S WEST" in this testimony because ELI's historical problems have been with U S WEST.

technical manager in Denver during that time, and I led teams working on local network and interconnection planning, OSS interface architectures and the technical aspects of product delivery.

For the 15 years before that, I worked at Bell Labs in New Jersey in a variety of positions. From January 1994 through May 1995 I led a team at Bell Labs investigating the various network infrastructure alternatives for entering the local telecommunications market. From 1992 through 1993, I was one of the key team leaders on a project to reduce AT&T's capital budget for network infrastructure. From 1986 through 1992, I led a Bell Labs group responsible for network performance planning and assurance for AT&T business markets. From 1983 through 1985, I was a member of the first AT&T Bell Labs cellular terminal design team. From 1980 through 1982, I was a member of a network architecture and network planning team at Bell Labs for AT&T's long distance services.

II. STATEMENT OF SCOPE AND SUMMARY OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to identify and address ELI's problems with U S WEST in conducting business as a CLEC in Arizona. U S WEST has caused ELI serious problems and harm to its business operations and customer relations due to untimely provisioning of interconnection trunks. U S WEST has hindered ELI's market entry in Arizona, restricted the rate at which ELI can grow its market and caused ELI to suffer customer losses.

Q. HOW DO THOSE PROBLEMS IMPACT U S WEST'S COMPLIANCE WITH SECTION 271 OF THE TELECOMMUNICATIONS ACT?

A. To comply with Section 271 of the Telecommunications Act of 1996, U S WEST must show, among other things, that it meets all terms of the 14-point competitive checklist found in Section 271(c)(2)(B) of the Act. With that in mind, I address the following checklist item in my testimony below:

- Interconnection and Collocation in accordance with Section 251(c)(2) and 252(d)(1) (*i.e.*, nondiscriminatory interconnection) [checklist item (i)].

I describe the problems ELI has encountered with U S WEST's provisioning of interconnection trunks in Arizona, how those problems have impacted ELI's business and why U S WEST does not comply with its 271 obligations as a result of those problems.

Q. PLEASE SUMMARIZE YOUR CONCLUSION THAT U S WEST HAS FAILED TO SATISFY THE INTERCONNECTION CHECKLIST ITEM.

A. Simply put, U S WEST has failed to provide ELI with interconnection trunking on just and reasonable terms. As will be described below, U S WEST has failed to build sufficient facilities for interconnection even though ELI has provided U S WEST with ample forecasts. U S WEST subsequently provisioned interconnection trunks in an inconsistent and unpredictable manner with some orders filled quickly and some taking three or more months to complete. ELI had many of its orders delayed due to the lack of U S WEST capacity at end office switches or on routes between offices. This would not

have occurred if U S WEST had built capacity to meet ELI's forecasts. Due to these problems with U S WEST's provisioning of interconnection trunks, ELI has been forced to constrain its marketing efforts in Arizona, and slow its growth. ELI will present data during the performance audit demonstrating lengthy and erratic trunk provisioning by U S WEST. ELI's experience with U S WEST's provisioning of interconnection trunks illustrates that U S WEST has not shouldered its responsibilities for interconnection and has failed to satisfy the interconnection checklist item for section 271 relief.

III. INTERCONNECTION

A. U S WEST'S INTERCONNECTION OBLIGATIONS.

Q. WHAT IS INTERCONNECTION?

A. The Public Switched Telephone Network ("PSTN") in the United States is required by law, and by customer demand, to be ubiquitous. That means any phone must be able to call any other phone. If a new ELI customer could not call a U S WEST customer, or a U S WEST customer could not call an ELI customer, ELI could not maintain a business. Interconnection is the linking of a CLEC network, ELI in this case, to an RBOC network, U S WEST in this case.

Q. IS INTERCONNECTION REQUIRED BY LAW?

A. Yes. One of the primary purposes of the Telecommunications Act of 1996 (the "Act") was to require all Local Exchange Carriers ("LECs") to interconnect their networks to new entrants. Before the Act, CLECs (like ELI) had to go to each state and convince the state legislature or PUC to force U S WEST to interconnect. Before the Act, U S WEST refused to interconnect with ELI and other potential CLECs. U S WEST

exercised monopoly power to keep competitors out of its local exchange business. After the Act, it became more difficult for U S WEST to keep its competitors out of the market because U S WEST was required to allow interconnection.

Q. DOES BLOCKING IMPACT INTERCONNECTION?

A. Yes. Blocking levels, the number and percent of calls between local customers that have no path and, thus, are blocked, directly impacts interconnection. Calls that are blocked between ELI customers and U S WEST customers effectively have no interconnection between the two networks.

Q. HAS U S WEST REFUSED TO INTERCONNECT WITH ELI?

A. Yes. As I will describe below, by (1) refusing to provide necessary forecasting information, (2) not building the necessary trunk capacity for interconnection, and (3) causing long provisioning delays, U S WEST essentially has refused to interconnect with ELI in Arizona. Of course, U S WEST has made no overt statement to that effect and maintains that it has never refused to interconnect with ELI. But the engineering facts tell a different story. U S WEST systematically has created delays, shortages, and problems for ELI that amount to a refusal to interconnect. My testimony below shows how U S WEST has created episodic and recurrent problems that have caused ELI to reduce, and sometimes halt, marketing efforts in Arizona due to problems associated with obtaining interconnection trunks.

B. THE FORECAST PROCESS.

Q. WHAT TYPES OF PROBLEMS HAS ELI HAD WITH INTERCONNECTION TO U S WEST IN ARIZONA?

A. ELI has had problems with U S WEST in the areas of forecasting and provisioning of interconnection trunks.

Q. WHAT IS THE FIRST STEP TO INTERCONNECTION?

A. Interconnection begins with a good forecasting process between the two companies. Forecasting is needed to assure that trunk capacity will be available when needed. Each company should provide the other with detailed traffic forecasts, blocking information, information on areas where capacity is in short supply and information on construction projects. The companies should have regular joint planning meetings to discuss forecasts and all other information that is necessary to anticipate traffic demands.

Q. WHY IS FORECASTING SO IMPORTANT?

A. Forecasting is the method telecommunications companies use to assure that adequate network capacity is built ahead of time. Each company should take the forecasts and build capacity and facilities to meet the anticipated traffic demands.

Q. WHAT HAPPENS IF ONE OF THE COMPANIES DOES NOT BUILD TO THE FORECAST?

A. If one of the companies, such as U S WEST, does not build to meet the interconnection forecasts, the consequences will be provisioning delays and the disruption of service to ELI's existing and future customers.

Q. IS ELI CONTRACTUALLY OBLIGATED TO PROVIDE FORECASTS TO U S WEST?

A. Yes. The Interconnection Agreement between ELI and U S WEST requires both companies to exchange forecasts and forecast information.

> "Intercompany forecast information must be provided by the Parties to each other four times a year. The quarterly forecasts shall include forecasted requirements for each trunk group identified in Paragraph G(2) of this Section. In addition, the forecast shall include, for tandem-switched traffic, the quantity of tandem-switched traffic forecasted for each subtending end office."[2]

Q. HAS ELI FULFILLED ITS FORECAST OBLIGATIONS TO U S WEST?

A. Yes. ELI consistently has provided U S WEST with thorough forecast information in Arizona on a quarterly basis and more frequently when requested. In fact, U S WEST has acknowledged and complimented ELI's "diligent" forecast efforts. See March 15, 2000 letter from U S WEST wholesale Vice President Judy Tinkham ("Not all co-providers do as diligent job of forecasting their trunk needs as ELI does.") (attached as exhibit A). ELI forecasted trunks down to the end office level. As will be discussed more fully later, ELI's actual trunk orders have been below ELI's trunk forecasts. Yet U S WEST still failed to build adequate trunk capacity for ELI's interconnection orders. It bears emphasis that ELI clearly has met its forecast obligations and U S WEST has failed to build to those forecasts.

---

[2] See Electric Lightwave, Inc. and U S WEST Communications, Inc. Arbitrated Interconnection Agreement for the State of Arizona, March 20, 1997, Section VI(I)(2).

C. PROVISIONING INTERVALS.

Q. WHAT IS INTERCONNECTION TRUNKING?

A. Interconnection trunking refers to the DS1 trunks that connect CLEC switches to U S WEST switches. Here, I will be referring to trunks that interconnect the ELI switch to the U S WEST switches in Arizona. The ELI network in Arizona is composed of one switch that serves all of ELI's customers in Arizona. The U S WEST network in Arizona is composed of 85 central offices and 78 remote switching locations with a total of approximately 2,700,000 customer lines.

Q. WHAT IS THE IMPACT OF INADEQUATE INTERCONNECTION TRUNKING?

A. Without adequate interconnection trunking, calls from ELI customers to U S WEST customers and from U S WEST customers to ELI customers cannot be completed. U S WEST has the vast majority of customers in Arizona. Each DS1 trunk between ELI and U S WEST can carry a maximum of 24 simultaneous calls.

Q. WHAT IS PROVISIONING OF INTERCONNECTION TRUNKS?

A. The provisioning of interconnection trunks refers to a process that culminates in the installation, testing and turn up of DS1 trunks between the CLEC switch and the U S WEST switch. The process begins with forecasting as described above. After forecasting, each company must budget for new capacity, spend the money necessary to build the new capacity, actually build the new capacity, place orders between the companies for the ordering of interconnection trunks, and then, install, test and turn up the trunks on the two switches.

Q. WHAT IS NECESSARY BEFORE THE ACTUAL PROVISIONING OF INTERCONNECTION TRUNKS CAN TAKE PLACE?

A. Before trunks can be provisioned, there must be available facilities between the two switches and both switches must have available trunk ports, sometimes called switch hooks.

Q. WHAT MUST BE DONE TO BUILD CAPACITY FOR INTERCONNECTION TRUNKING?

A. Both companies (ELI and U S WEST) must build sufficient capacity at their switches and between their switches to install the interconnection trunks. Generally, the capacity of the fiber optics between the switches is not an issue. The biggest problem has been switch ports at the U S WEST switches and to a lesser extent the electronics on the facilities between the switches. Switches such as the LUCENT 5ESS and NORTEL DMS have multiple switch modules. Each switch module can accommodate 40 DS1 switch ports. Each DS1 switch port accommodates 24 DS0 trunks. A switch module, fully populated, will accommodate 960 DS0 trunks. A fully populated switch module costs approximately $80,000 from the vendor.

Q. U S WEST CLAIMS THAT NEW CAPACITY TAKES 6 MONTHS TO INSTALL. IS THAT ALWAYS THE CASE?

A. The installation of a new switch module typically takes between 4 and 6 months. But many times a switch module is installed without all of the circuit boards which are needed to terminate the DS1 trunks. That is an economical practice which reduces the initial installation cost. The DS1 circuit boards can be added as needed.

Additional capacity can be added quickly, in a matter of days, if this practice is followed. So a blanket statement that new capacity takes 6 months to install is not correct. Proper network forecasting and budgeting will assure that a carrier has capacity when it is needed. Both ELI and U S WEST should build capacity to meet the interconnection forecasts.

Q. WHAT DOES "BUILDING TO FORECAST" MEAN?

A. Building to forecast means adding capacity to a switch or to a facility route in anticipation of increased traffic in the future. That's the main purpose of a trunk forecast. Adding switch modules takes up to six months to install. Adding facilities routes can take a year or more. Companies should build to forecasts, therefore, because it takes time to install new capacity.

Q. DOES U S WEST BUILD TO ELI'S FORECASTS?

A. No. U S WEST does not build to ELI's forecasts. As exhibit B, I've enclosed examples of orders where ELI forecasted the need for additional trunks. See April 6, 2000 letter from Nigel Bates to U S WEST (exhibit B). These trunks obviously require additional facilities and switch terminations. U S WEST did not have the capacity necessary for the forecasted trunks when ELI placed orders for the trunks. U S WEST "held" many of ELI's trunk orders due to lack of capacity. If U S WEST had built to ELI's forecasts, capacity would have been available.

Q. WHAT WAS THE EFFECT OF U S WEST'S REFUSAL TO BUILD TO ELI'S FORECASTS?

A. The effect on ELI has been long provisioning delays for trunk orders.

Provisioning delays cause ELI to scale back its marketing efforts to service the needs of existing and new customers.

Q. DID ELI BRING THESE PROBLEMS TO U S WEST'S ATTENTION?

A. Yes. ELI sent numerous letters and made phone calls to U S WEST account representatives and executives addressing interconnection trunk provisioning. To say the least, U S WEST was slow in responding to the problems. See, e.g., February 28, 2000 letter from Tim Peters (attached as exhibit C). As a result ELI, experienced significant financial losses and was forced to raise those issues with the Arizona Commission and contemplated filing a complaint in Arizona.

Q. HAS U S WEST PROVISIONED THE TRUNKS THAT WERE THE FOCUS OF THESE PROBLEMS?

A. U S WEST has provisioned the majority of the trunks that were requested, but the provisioning intervals for the trunks has been very long. And there are several trunks still being "held" by U S WEST.

Q. WHAT IS A PROVISIONING INTERVAL?

A. A provisioning interval is the time between when an order is placed until the trunk is actually installed and working.

Q. HOW DOES U S WEST CHARACTERIZE THEIR PROVISIONING INTERVALS FOR INTERCONNECTION TRUNKING IN THEIR TESTIMONY IN THIS CASE AND IN THE RESULTS THEY ARE REPORTING TO THE ARIZONA COMMISSION?

A. U S WEST reports provisioning intervals for interconnection trunks as part of the OP4 metric. U S WEST shows results that look very favorable for CLECs compared to the results U S WEST is showing for itself. Mr. Freeberg, in his testimony, implies that U S WEST is provisioning interconnection trunks in an acceptable manner.

Q. DO YOU HAVE ANY PROBLEMS WITH THE WAY U S WEST IS CHARACTERIZING THESE INTERVALS?

A. Yes. First, U S WEST reports that provisioning intervals between CLEC trunk orders are over three times faster than internal U S WEST trunk orders. These results do not seem credible. I would expect the results to be almost the same, given that the provisioning processes are the same. Second, the intervals that ELI is experiencing for interconnection trunk provisioning are much longer than the average CLEC intervals that U S WEST is reporting. Either U S WEST is discriminating against ELI with respect to other CLECs or U S WEST is incorrectly reporting CLEC provisioning intervals.

Q. WHAT HAS BEEN ELI'S EXPERIENCE IN ARIZONA WITH THE PROVISIONING OF INTERCONNECTION TRUNKS FROM U S WEST?

A. I have done a preliminary analysis of all trunk orders from ELI to U S WEST in Arizona for 1999 and 2000 to date. The average provisioning interval over this period is 50 calendar days or approximately 35 business days. The standard deviation is

very high at 51 calendar days (36 business days.) This large standard deviation is consistent with the fact that many of the orders take much longer than the average for U S WEST to provision. Eighteen orders took over 80 days to provision and 5 orders took over 150 days to provision.

Q. WHY ARE THE ELI AVERAGES YOU ARE DESCRIBING SO MUCH LONGER THAN THE INTERVALS U S WEST HAS PRESENTED IN ITS OP4 METRIC?

A. I don't know. That's an issue for the performance audit. ELI orders must be compared on an order-by-order basis with the corresponding U S WEST data. ELI has the background data on these orders and is eager to assist with the performance audit. ELI believes that the performance audit is the correct forum to explore the validity of the analysis U S WEST is conducting and the underlying data. Obviously, there is a big difference in U S WEST's results and ELI's data and experience.

Q. WHAT IS THE EFFECT ON ELI OF INTERCONNECTION ORDERS THAT TAKE A VERY LONG TIME TO PROVISION?

A. ELI has been inhibited from servicing the needs of existing customers and meeting the needs of new customers in Arizona due to the very long provisioning times at some of the U S WEST offices. ELI customers will "pull" calls from U S WEST customers in every switch. In a situation where end office trunking has not been provisioned or augmented as ordered to some offices, ELI cannot aggressively market to customers in any location in an area due to lack of facilities as a result of delayed interconnection.

Q. HOW DOES THAT IMPACT ELI'S BUSINESS?

A. ELI must limit its business based on the longest provisioning intervals. Given that some of these intervals are longer than 150 days, ELI's business is suffering almost a 6 month setback due to U S WEST provisioning delays.

Q. DID U S WEST PREPARE ITS NETWORK FOR INTERCONNECTION?

A. No. U S WEST did not properly build up its network to prepare for interconnection. U S WEST did not build to ELI forecasts as witnessed by the provisioning delays described above and the blocking that will be discussed in the next section.

Q. DID ELI PREPARE ITS NETWORK FOR INTERCONNECTION?

A. Yes. ELI purchased the necessary switching and facilities equipment to meet its forecasts. Interconnection orders were not delayed due to ELI capacity problems.

D. EXCESSIVE BLOCKING.

Q. WHAT IS CALL BLOCKING WITH RESPECT TO INTERCONNECTION?

A. If there is only one DS1 trunk between an ELI switch and a U S WEST switch, at maximum capacity, the trunk will carry 24 simultaneous calls. Since ELI has chosen to provision two-way trunks, either the ELI customer or the U S WEST customer could originate these calls. If 24 calls are in progress when a 25th customer attempts to make a call, the call will receive a fast busy signal or a recorded message. That is call

blocking. Since one call out of 25 is being blocked, the blocking level for this trunk group would be 4%. If 26 calls were attempted, the blocking rate would be 8%, etc.

Q. WHAT IS EXCESSIVE CALL BLOCKING?

A. Generally, call blocking greater than 1% (one call blocked for every hundred calls) is considered excessive. Most states prescribe this level of call blocking as the maximum allowed. One percent (1%) call blocking is an end-to-end measure. Tandem trunks should be designed to have no more than ½% blocking due to the fact that there are two trunks in the path.

Q. WHAT IS THE SPECIFIED DESIGN CRITERIA FOR INTEROFFICE TRUNKS IN ARIZONA?

A. The minimum engineering design standard in Arizona for interoffice trunking for local and extended area service is B.01 (P.01) level of service. That is the same as a maximum of 1% blocking.[3] That criteria applies to busy hour traffic.

Q. ARE INTERCONNECTION TRUNKS BETWEEN ELI AND U S WEST INTEROFFICE TRUNKS?

A. Yes. Trunks between ELI and U S WEST, which carry local traffic, should be included in the prescribed standard for Arizona. They are trunks "for interoffice trunking for local and extended area service."

[3] See U S WEST Service Quality Plan Tariff, Arizona, Docket No. E-21051-93-183, Decision No. 59421, at 2.5.4.

Q. HAVE THE U S WEST INTERCONNECTION TRUNKS TO ELI ALWAYS MET THE B.01 CRITERIA?

A. No. Data provided by U S WEST to ELI shows interconnection trunks with blocking or overflow above 1%. But that's not the biggest problem ELI faces. The biggest problem is that when interconnection trunks are overflowing, ELI has no knowledge of overflow behind the U S WEST tandem.

Q. DOES U S WEST MEET THE B.01 STANDARD FOR ITS TRUNKS BETWEEN THE U S WEST LOCAL TANDEM AND U S WEST END OFFICES?

A. No. In discovery produced by U S WEST in this case, there were numerous U S WEST trunks with high levels of blocking. When trunks between a U S WEST end office switch and the tandem switch are blocking, calls from U S WEST customers to ELI customers will experience that same blocking level when there is no direct trunk to the end office or when the direct trunk is full.

Q. IS THIS BLOCKING BEHIND THE U S WEST LOCAL TANDEM A PROBLEM FOR ELI?

A. Yes. ELI and other CLECs are more dependent on the U S WEST Local Tandem than U S WEST. U S WEST has very large trunk groups that directly connect its End Offices. The Local Tandem is used only for overflow. ELI and other CLECs have much less trunking directly to the U S WEST End Offices. The delays in provisioning trunking to U S WEST End Offices (as discussed in the previous section), exacerbate this situation. A larger percentage of ELI calls must go through the U S WEST Local Tandem than calls between U S WEST customers. As a result, ELI

experiences greater levels of blocked calls than U S WEST.

Q. IS ELI AWARE WHEN THIS BLOCKING OCCURS?

A. No. ELI can't tell when there is high blocking behind the Local Tandem on calls from U S WEST customers to ELI customers. ELI could run special studies to determine when ELI customers can't complete calls to U S WEST customers through the Local Tandem. But ELI has no way of knowing if U S WEST customers trying to call ELI customers are getting blocked behind the Local Tandem. Unfortunately, U S WEST refuses to provide that information.

Q. SHOULD U S WEST PROVIDE THIS INFORMATION TO ELI?

A. Yes. Complete blocking information is necessary for ELI to operate its network and to determine if U S WEST fulfills its interconnection obligations. Such information is critical for properly sizing trunks to the U S WEST end offices. But, again, U S WEST has refused to provide this information. The performance data U S WEST provides in association with NI1c gives the average level of blocking over an entire month for these trunks. ELI, however, needs this information for each individual trunk on each switch, during the busy hour, for proper trunk sizing.

Q. WHY IS IT HARMFUL TO ELI WHEN U S WEST CUSTOMERS CANNOT CALL ELI CUSTOMERS?

A. Severe blocking will cause ELI to lose customers. For example, if a flower shop changed its local telephone service to ELI, the flower shop owner would want to call their suppliers in the same city. If the suppliers were U S WEST customers, those calls would be from an ELI customer to a U S WEST customer. More importantly for the

flower shop, since the majority of Arizona customers subscribe to U S WEST service, if U S WEST customers cannot call the flower shop (as an ELI customer), the flower shop can't do any business. Severe blocking will force the flower shop to find another local service provider.

Q. WHAT CAUSES EXCESSIVE BLOCKING BEHIND THE U S WEST LOCAL TANDEM SWITCHES?

A. The answer is simple--U S WEST did not prepare its network for interconnection. That's true in two respects. First, U S WEST has not built interconnection trunk capacity to ELI and other CLEC forecasts. That leads to the provisioning problems discussed earlier. Second, U S WEST has not augmented trunks behind the Local Tandem switches as they should have. U S WEST knew CLECs would be heavily interconnected at the Local Tandem. U S WEST, therefore, should have built up capacity in the trunk groups from the Local Tandem to the End Offices. That capacity would assure that calls to and from CLEC customers would be completed with the same performance and reliability as calls between U S WEST customers. Alternatively, U S WEST should allow ELI and other CLECs to interconnect at the U S WEST "access" tandem switches as well as the "local" tandem switches.

Q. WHAT IS THE DIFFERENCE BETWEEN AN "ACCESS" TANDEM AND A "LOCAL" TANDEM?

A. Technically there is no difference. U S WEST is the only RBOC that has designated some tandems as "access" tandems (which only switch toll calls), and other tandems as "local" tandems (which only switch local calls). Most RBOCs switch both

types of calls on a single switch. In many cases, the U S WEST "access" and "local" tandem switches are the same physical switch that is logically divided between the two functions. Unfortunately, problems arise because U S WEST has engineered the "access" tandems for a better blocking grade of service. Engineering in this manner discriminates against ELI and other CLECs. Since switch modules are segregated, switch capacity is a problem when the two functions are separated onto two switches.

Q. SHOULD U S WEST ALLOW CLECS TO INTERCONNECT AT THE ACCESS TANDEM?

A. Yes. Under the Act, U S WEST is required to provide interconnection at any technically feasible point. U S WEST violates the Act by refusing interconnection at the access tandem. That is yet another example of discrimination against ELI and other CLECs.

Q. IS THERE EVER BLOCKING IN THE ELI NETWORK?

A. No. The ELI network in Arizona is one switch. Switches are designed to be non-blocking. Unless a switch is out of commission, due to a failure, which is extremely rare, the switch does not cause blocking. Blocking is caused by a lack of capacity in the trunks between switches.

E. COMBINED EFFECTS OF PROVISIONING DELAYS AND BLOCKING.

Q. ARE PROVISIONING DELAYS AND BLOCKING RELATED?

A. Yes. They are both caused by U S WEST's failure to build sufficient capacity in their network to accommodate interconnection at a level which is equal in

quality to the interconnection and service U S WEST provides itself, its customers, and other parties such as Long Distance Carriers.

Q. WHAT ARE THE EFFECTS OF PROVISIONING DELAYS?

A. Provisioning delays can cause or exacerbate blocking. The initial interconnection trunk is the trunk group to the U S WEST Tandem switch. Subsequent orders will be for end office trunking when traffic directed to that end office warrants direct trunking. If trunks are ordered to an end office and those trunks are delayed, severe blocking may occur. If existing end office trunks need to be augmented due to increases in traffic and those trunk orders are delayed, blocking may occur. The combined effects for ELI are decreased service levels, service interruptions and customer dissatisfaction.

Q. HAVE PROVISIONING DELAYS AND ASSOCIATED BLOCKING CAUSED ELI TO RESTRICT THEIR MARKETING AND TURN-UP OF NEW CUSTOMERS?

A. Yes. ELI has been forced to limit the number of new customers that they put on their network at any given time. ELI implemented a procedure called "micro management" of customer turn-up.

Q. WHAT IS MICRO-MANAGEMENT OF CUSTOMER TURN-UP?

A. The engineering organization at ELI constantly monitors the provisioning of new interconnection trunks to U S WEST and the blocking on all interconnection trunks to U S WEST. ELI estimates the amount of traffic that new customers will "pull" from U S WEST switches where ELI has no direct trunking. When a new

interconnection trunk is installed, or an existing trunk is augmented, ELI's engineering department will tell its sales department to add a few customers to the network. If ELI adds too many customers, ELI knows from experience that blocking will occur. Marketing and sales efforts are scaled to match the interconnection network capabilities and prevent call blocking from occurring.

Q. HAS ELI BEEN FORCED TO MICRO-MANAGE CUSTOMER MARKETING, SALES AND TURN-UP IN ARIZONA?

A. Yes. As in the other states where ELI has attempted to enter the market in U S WEST territory, ELI has found it necessary, due to interconnection trunk provisioning problems and associated blocking, to micro-manage their marketing, sales and customer installation efforts.

Q. WHY HAS THIS MICRO-MANAGEMENT BEEN NECESSARY?

A. ELI has been forced to micro-manage because U S WEST has not prepared its network for interconnection in Arizona.

F. U S WEST POLICIES HAVE DELAYED INTERCONNECTION.

Q. DOES U S WEST REFUSE TO TAKE TRUNK ORDERS FOR INTERCONNECTION WHEN A COLLOCATION FACILITY IS NOT COMPLETE?

A. Yes. U S WEST has confirmed in discovery that they will not accept orders for interconnection trunks until collocation is complete.

Q. DOES THIS U S WEST POLICY CAUSE DELAYS IN INTERCONNECTION?

A. Yes. As in the case of meet points, U S WEST's policy causes CLECs to suffer lengthy delays in getting interconnection trunks provisioned by U S WEST.

Q. DOES U S WEST REFUSE TO TAKE TRUNK ORDERS FOR INTERCONNECTION WHEN A T3 TRUNK FACILITY HAS NOT BEEN COMPLETED?

A. Yes. If a T3 facility has been delayed such that there is no CFA (Connecting Facility Assignment), then U S WEST refuses to take the trunk order for interconnection trunking.

Q. DOES THIS U S WEST POLICY CAUSE DELAYS IN INTERCONNECTION TRUNKING?

A. Yes. Again, U S WEST's policy delays CLEC interconnection. Even further, if the collocation is not complete, the T3 facility can not be ordered, so the delays are in series.

Q. IS THERE A WAY FOR U S WEST TO SOLVE THIS PROBLEM, HELPING TO SPEED UP INTERCONNECTION?

A. Yes. It would be easy for U S WEST to give the CLEC a temporary CFA in each of these cases. CLEC trunk orders could then be processed and get in the queue for trunk ports on the switches. That would remedy, at least to some extent, these interconnection and provisioning delays.

G. SUMMARY OF PROBLEMS WITH INTERCONNECTION.

Q. CAN YOU SUMMARIZE U S WEST'S POLICIES AND PRACTICES WITH RESPECT TO INTERCONNECTION?

A. ELI has first hand experience with U S WEST in five states, including Arizona. U S WEST consistently has worked against ELI's market entry in all of those states. Interconnection with U S WEST has been a painful and frustrating experience for ELI. Simply put, U S WEST has failed to fulfill its interconnection and provisioning obligations on several fronts:

- Failure of U S WEST to use forecasts provided by ELI in the manner for which they were intended.
- Failure of U S WEST to provide ELI with U S WEST forecasts and forecast information as required by contract.
- Failure of U S WEST to build the necessary capacity within its network for interconnection.
- Discriminatory provisioning delays for interconnection trunks.
- Discriminatory policies which lead to provisioning delays.
- Severe and illegal blocking levels on both interconnection trunks and trunks within the U S WEST network.

The combined effect of U S WEST's provisioning/interconnection failures and policies on ELI is discriminatory service, interrupted or failed service and customer dissatisfaction.

Q. HOW COULD THE PROBLEMS ASSOCIATED WITH THE LACK OF INTERCONNECTION CAPACITY BE ADDRESSED?

A. U S WEST needs to commit to meet the required quarterly forecasts and to build the required capacity to assure that the capacity is available for the CLEC that reserved it.

Q. HAS U S WEST MET THE REQUIREMENTS FOR 271 RELIEF FOR CHECKLIST ITEM (i) INTERCONNECTION?

A. No. U S WEST continues to have policies and practices that discriminate against ELI and other CLECs. U S WEST fails to provide non-discriminatory interconnection "with a level of quality at least equal to that which they provide themselves or others."

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

10407-0008/858296v3

A

U S WEST
200 South 5th Street Room 2400
Minneapolis, MN 55402
612 663-3013 (phone)
612 663-3554 (fax)
612 272-2977 (cellular)
800 759-7243 pin# 308-7451 (pager)
e-mail: jtinkha@uswest.com

Judy Tinkham
Vice President,
Wholesale –
Emerging & Diversified Markets

Copy: Nigel Bates
Mary Tee
Ken Bender
Randy Lis
Doug Sink
Correspondence File
orig

March 15, 2000

Tim Peters
Vice President
Government and Regulatory Affairs
Electric Lightwave, Inc.
4400 NE 77th Avenue
Vancouver, WA 98662

Dear Tim,

This is in response to your letter dated February 28, 2000, concerning the trunking orders in the Phoenix metro area. I'm glad that you have raised your concern; with both U S WEST and ELI working together we can minimize the inconvenience to ELI.

I understand that Tom Maher has been in touch with you since the day we received your letter and has been giving you periodic updates on the status of the Phoenix orders. I also understand that we have been providing your office with a weekly status spreadsheet. This effort to provide you with updates should allow ELI to plan around any problems it may experience regarding facilities provided to it.

In addition to my team working with ELI, I have personally been involved in addressing your concerns about the Phoenix trunking orders. I have been involved in discussions with various departments within U S WEST to specifically discuss these orders. Based upon these meetings, the facilities of concern have been addressed. Specifically, four are no longer held for "facilities" reasons and are scheduled for an expedited turn up, and five facilities should be in place and turned up earlier than previously expected.

In your letter you comment on ELI's forecasting efforts and your frustration that there were still insufficient facilities for these trunking orders. U S WEST appreciates the effort ELI has expended in forecasting and it has allowed us to deploy facilities where there is a demand for such facilities. Not all co-providers do as diligent a job of forecasting their trunking needs as ELI does. However, the problem arises mainly due to the growth and demand that the industry has experienced in the Phoenix area, which in turn has made it difficult in all central offices to meet our internal objectives of six months inventory.

Tim, I want to give you my personal assurance that we will address the facilities shortages and complete your Phoenix orders as soon as possible. As always, if you have any ideas as to how U S WEST can provide better service to you, please do not hesitate to let me know. In addition, if you have any concerns or questions, please feel free to contact me. I look forward to our meeting later this week where we can personally discuss these issues or any other issues that you may want to discuss.

Sincerely,

Judy Tinkham

cc: Keith Galitz
Tom Maher

B

TIM-FYI

Mailing Address:
Electric Lightwave, Inc.
4400 N.E. 77th Avenue
Vancouver, Washington 98662
(360) 816-3000 Fax: (360) 816-8934

ELECTRIC LIGHTWAVE

April 6, 2000

Mr. Keith Galitz,
General Manager – Western Region,
U. S. West Communications, Inc.,
421 SW Oak Street, Room 830,
Portland, OR 97204

Dear Keith:

This is a follow up to the correspondence Tim Peters sent Judy Tinkham dated February 28, 2000, and Judy's reply dated March 15, 2000, dealing with interconnection trunking held orders in the Phoenix and Boise markets.

As you are aware, the impact of this situation on ELI's business has been severe: we have experienced a significant loss of revenue and we have, for several months, been unable to satisfy our customers' essential business needs. In light of this, I expect US West to help mitigate this financial loss to ELI. I have outlined our expectations below and, as background, have also provided information on the sequence of events, the current held order view, and an assessment of the financial impact on ELI.

As required, we met with US West in each quarter throughout 1999 to discuss ELI's detailed quarterly trunking requirements. In early December, even though our order quantity remained below forecast, we began to experience significant trunking problems in Arizona. We notified US West but our request for immediate assistance brought about only minor relief. Towards the end of December, ELI escalated this issue to VP level but without satisfactory resolution. The situation was further reviewed at the February 17, 2000, quarterly forecasting meeting where we were unable to establish a suitable resolution. It is worth noting that, in the 4th Quarter, 1999, our Phoenix market was running at a rate of only 46.5% actual trunks against forecasted trunks thereby keeping us well below our forecasted capacity. By the end of February, we had once again escalated the issue to VP level for resolution and requested weekly updates and conference calls with the US West Account Team. These weekly calls are currently ongoing.

The following data is a summary view of the held orders in AZ, ID, OR, and WA during this period and demonstrates the significant gaps which exist between ELI's required dates and US West's delivery dates.

# DS0	Month Required	USW Original Date	USW Revised Date
Roll	September	June	March
192	October	November	April
72	November	February	March
144		March	March
96	December	June	March
48		June	May
120		March	March
72		April	March
48		June	June
144		August	August
96	January	April	May
144		March	April
144		June	March
432		May	May
144	February	May	March
Roll		June	March
312		May	April
216		April	March
72		May	May
240		?	?
72	March	April	April
48		August	August
144		July	April
72		?	April
48		?	?
600		April	March

While we appreciate the fact that through VP escalation US West has been able to better some of the original dates, you can see there remains a number of serious gaps. I believe ELI has consistently undertaken the forecasting process with due diligence, however, this situation gives us grave concern about the validity of the forecasting process.

The impact of this situation has been specifically damaging in our Phoenix market where we have been unable to meet the demands of a number of our high profile customers for both our PRI and TI product offerings. Furthermore, we have had to put our sales effort on a temporary hold. The following matrix quantifies at a high level ELI's lost revenue over this period for PRI orders currently in held status. What is difficult to assess, but which is also very significant, is the strain this has placed on our customers' confidence in our business.

ELECTRIC LIGHTWAVE

Due Date	# Customers	# PRI Orders	MRC	NRC
August	1	3	$2812	Na
September	2	3	$3073	$2672
October	2	16	$10910	$3500
November	2	39	$27550	$15200
December	2	41	$26490	$10000
January	2	65	$50645	$38100
February	4	33	$26736	$18722
March	1	8	$8000	$4000

The overall lost revenue between October and March, and I stress this is only for held PRI orders in the Phoenix market, for both MRC and NRC is approximately $567,525 and $103,196 respectively. This does not include lost revenues from sales we have been unable to close during this period due to the lack of interconnection capacity.

I believe it is evident that US West's inability to provision adequate interconnection facilities, despite our consistent forecasting submissions, has caused ELI a significant loss of revenue. As I indicated at the beginning, I do expect US West to help mitigate this significant revenue loss and, to this end, I propose US West offer ELI remuneration in the amount of $670,271. In addition, I expect US West to be prepared to offer during the current Interconnection Agreement negotiations a process which spells out obligations and penalties related to forecasts and deployment of interconnection facilities.

Keith, I look forward to speaking with you about this at your earliest convenience and please feel free to call me at (360) 816-5001.

Sincerely,

Nigel Bates
Director – Regulatory and Industry Affairs

cc: Tim Peters
Leslie Brown
Karen Johnson

C

cc. TP
NB
MT

Mailing Address:
Electric Lightwave, Inc.
4400 N.E. 77th Avenue
Vancouver, Washington 98662
(360) 816-3000 Fax: (360) 816-8934

ELECTRIC LIGHTWAVE

February 28, 2000

Ms. Judy Tinkham
Vice President
Wholesale Emerging & Diversified Markets
U S WEST Communications, Inc.
200 South 5th Street #2400
Minneapolis, MN 55402

MASTER FILE COPY

Dear Judy:

On February 14, 2000, I requested vice president escalation of approximately ten orders for interconnection trunking between ELI and U S WEST end offices in the Phoenix market area that have gone held over the last few months. Unfortunately, subsequent discussions with our U S WEST account team have failed to produce acceptable relief dates. The purpose of this letter is to make you personally aware of the severity of the situation and to request additional assistance in addressing the problem.

I find it difficult to express my level of displeasure regarding U S WEST's inability to provision adequate interconnection facilities which once again leaves Electric Lightwave in a position of not being able to fill its customer orders. This is especially upsetting in light of the fact that we were told repeatedly last year that by the end of 1999 U S WEST would have in place sufficient capacity to handle at least six months demand.

Even more frustrating is the fact that these orders have gone held in spite of Electric Lightwave's longstanding forecasting efforts. The orders that have gone held are consistent in terms of their quantity and timing to earlier provided forecasts, yet U S WEST still failed to have the facilities in place to fill them.

Equally concerning is the possibility that this problem may not be limited to just the Phoenix market. We are experiencing held orders in other markets and have immediate concerns with the Boise area.

I ask that you become personally involved in this situation as soon as possible due to the impact these facilities shortages are having on Electric Lightwave's business. I request that you apprise me of the situation and U S WEST's efforts to resolve the problem no later than this Thursday, March 2.

If you have any questions please feel free to contact me at 360-816-3989.

Sincerely,

Timothy H. Peters
Vice President – Government & Industry Affairs

cc: Dave Sharkey
Randy Lis

DRAFT

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
WILLIAM A. MUNDELL
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC. COMPLIANCE WITH SECTION 271 OF THE TELECOMMUNICATIONS ACT OF 1996.	No.: T-00000A-97-0238 **NOTICE OF FILING TESTIMONY OF KEN WILSON FOR § 271 WORKSHOP ON CHECKLIST ITEMS 1, 11 AND 14**

In preparation for the § 271 workshop on checklist items 1, 11 and 14, Electric Lightwave, Inc. hereby files the testimony of Ken Wilson.

Dated this _____ day of August, 2000.

GALLAGHER & KENNEDY, P.A.

BY: _____
Michael M. Grant
Todd C. Wiley
Gallagher & Kennedy, P.A.
2575 East Camelback Road
Phoenix, Arizona 85016-9225
Attorneys for Plaintiff

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

ORIGINAL and ten copies filed
this date with Docket Control.

COPY of the foregoing mailed
this ___ day of August, 2000, to:

Maureen A. Scott
Legal Division
Arizona Corporation Commission
1200 W. Washington St.
Phoenix, AZ 85007

Thomas M. Dethlefs
U S WEST Communications, Inc.
Suite 5100
1801 California St.
Denver, CO 80202

Timothy Berg
Fennemore Craig, P.C.
Suite 2600
3003 N. Central Ave.
Phoenix, AZ 85012

Maureen Arnold
U S WEST Communications, Inc.
Room 1010
3033 N. Third St.
Phoenix, AZ 85012

Richard S. Wolters
AT&T Communications of the Mountain States, Inc.
Room 1575
1875 Lawrence St.
Denver, CO 80202

Patricia L. vanMiddle
AT&T
Suite 828
2800 N. Central Ave.
Phoenix, AZ 85004

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

Joan Burke
Osborn Maledon
21st Floor
2929 N. Central Ave.
P.O. Box 36379
Phoenix, AZ 85067-6379

Mark Dioguardi
Tiffany and Bosco PA
500 Dial Tower
1850 N. Central Ave.
Phoenix, AZ 85004

Nigel Bates
Electric Lightwave, Inc.
4400 NE 77th Ave.
Vancouver, WA 98662

Thomas L. Mumaw
Snell & Wilmer
One Arizona Center
Phoenix, AZ 85004-0001

Stephen H. Kukta
Sprint Communications Company, L.P.
External Affairs, Western Region
7th Floor
1850 Gateway Dr.
San Mateo, CA 94404

Thomas H. Campbell
Lewis & Roca
40 N. Central Ave.
Phoenix, AZ 85007

Bill Haas
Richard Lipman
McLeodUSA
6400 C. Street, SW
Cedar Rapids, IA 54206-3177

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

Bradley Carroll, Esq.
Cox Arizona Telcom, L.L.C.
1550 W. Deer Valley Road
Phoenix, Arizona 85027

Richard M. Rindler
Morton J. Posner
Swidler Berlin Shereff Freidman, LLP
Suite 300
3000 K St., N.W.
Washington, DC 20007

Michael W. Patten
Brown & Bain
2901 N. Central Ave.
P.O. Box 400
Phoenix, AZ 84001-0400

Charles Kallenbach
American Communications Services, Inc.
131 National Business Pkwy.
Annapolis Junction, MD 20701

Karen L. Clauson
Thomas F. Dixon
MCI Telecommunications Corp.
Suite 3900
707 17th St.
Denver, CO 80202

Joyce Hundley
United States Department of Justice
Antitrust Division
Suite 8000
1401 H St., N.W.
Washington, DC 20530

Scott Wakefield
RUCO
Suite 1200
2828 N. Central Ave.
Phoenix, AZ 85004

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000

Daniel Waggoner
Davis Wright Tremaine
2600 Century Square
1501 Fourth Ave.
Seattle, WA 98101-1688

Alaine Miller
Nextlink Communications, Inc.
Suite 2200
500 18th Ave.
Bellevue, WA 98004

Karen L. Clauson
Eschelon Telecom, Inc.
Suite 120
730 2nd Ave South
Minneapolis MN 55402

10407-0008/857733

GALLAGHER & KENNEDY, P.A.
2575 E. CAMELBACK ROAD
PHOENIX, ARIZONA 85016-9225
(602) 530-8000